BA/BE
ELECTRONIC SUBMISSION DOCUMENT
ESD TEMPLATE

IMPORANT NOTES:
Do not leave any field blank; use N/A to indicate that a field was intentionally not entered.
When a list of options such as {original, amendment, supplement} is provided, you MUST enter one of the given options. If the list is followed by ". . .", acceptable entries are not limited to those in the list.
To repeat a block, copy everything from the |BEGIN ...| statement to the corresponding |END ...| statement. If there is no data for a section, such as URINE INFO, please delete the entire block from |BEGIN ...| to |END ...|.
Include comments using /* and */ as delimiters: e.g., /* This is a comment */

|BEGIN SUBMISSION INFO|

::ANDA NO.::
FDA-assigned number that uniquely identifies this application
integer, up to 6 digits

::SUBMISSION TYPE::
type of current submission
{original, amendment, supplement}

::SUBMISSION NO.::
applicant-assigned number that identifies this submission within the application, use 1 for first submission of year, 2 for second...
alphanumeric

::GENERIC DRUG PRODUCT NAME::
the official name of the drug product, exactly as it appears in the USP (if applicable)
text

::APPLICANT::
unique three letter identifier of company sponsoring this submission (requires EVA registration)
text

::US AGENT::
name of agent representing applicant in US (N/A if US applicant)
text

::SUBMISSION DATE::

date of this submission
mm/dd/yyyy

::NO. OF WAIVERS::
total number of waivers requested, one for each strength and study type (bioequivalence or dissolution)
integer

|**BEGIN WAIVER INFO**| (REPEAT FOR EACH WAIVER REQUESTED)

::STUDY TYPE::
type of study involved in request
{bioequivalence, dissolution}

::DRUG STRENGTH::
strength of drug for which waiver is requested, including units
alphanumeric

::LETTER DATE::
date of official waiver request
mm/dd/yyyy

|**END WAIVER INFO**|

::NO. OF SUBMITTED DOCUMENTS::
total number of computer files included in this submission
integer

|**BEGIN SUBMITTED DOCUMENT INFO**| (REPEAT FOR EACH DOCUMENT)

::FILE TYPE::
type of document of the four possible types of submission documents
{main, data, report, sas}

::DESCRIPTION::
brief explanation of document contents
text

::FILE NAME::
name of computer file
valid DOS filename that follows naming conventions of this submission format

::FORMAT::
file format or source of file

{ASCII, WordPerfect 5.1, Word 6.0, . . .}

|END SUBMITTED DOCUMENT INFO|

::NO. OF PRODUCTS::
total number of drug products (test + reference) involved in this submission
integer

|BEGIN PRODUCT INFO| (REPEAT FOR EACH PRODUCT)

::PRODUCT ID::
a unique identifier for this product to be used throughout application
alphanumeric

::TEST OR REFERENCE::
indication of whether this product is used as a test or a reference
{test, reference}

::PRODUCT NAME::
brand or generic name of this product
text

::MANUFACTURER NAME::
name of company that manufactured this product
text

::MANUFACTURE DATE::
date of manufacture of this product
mm/dd/yyyy

::EXPIRATION DATE::
date of expiration of this product
mm/dd/yyyy

::DOSAGE FORM::
form of drug product
{aerosol, capsule, cream, emulsion, enema, gas, gel, granule, inhalant, injection, liquid, lotion, ointment, paste, patch, powder, solution, spray, suppository, suspension, syrup, tablet, . . .}

::ROUTE OF ADMINISTRATION::
route by which drug product is administered
{buccal, caudal block, dental, epidural, inhalation, intradermal, intramuscular, intravenous, irrigation, nasal, nerve block, ophthalmic, otic, oral, percutaneous, rectal, subcutaneous, sublingual, topical, transdermal, vaginal, . . .}

::STRENGTH UNITS:: mg
units used throughout this submission for dose or strength values
text

::STRENGTH::
strength of the dosage unit (in units given above)
numeric

::DELIVERY RATE UNITS::
units used throughout submission for delivery rate (N/A if not transdermal)
text

::DELIVERY RATE::
delivery rate of product in appropriate units (N/A if not transdermal)
numeric

::BATCH/LOT NO.::
identifier for this batch or lot
alphanumeric

::THEORETICAL YIELD::
planned batch or lot size
numeric

::ACTUAL YIELD::
obtained batch or lot size
numeric

::NO. OF INGREDIENTS IN FORMULATION::
number of ingredients (both active and inactive) in the formulation of this product
integer

|**BEGIN INGREDIENT INFO**| (REPEAT FOR EACH INGREDIENT)

::INGREDIENT::
name of ingredient, exactly as it appears in the USP (if applicable)
text

::ACTIVE::
indication of whether ingredient is active or inactive
{yes, no}

::QUANTITY::
amount of ingredient in a unit dose (in appropriate units)

numeric

::POTENCY::
active % of ingredient in each unit dosage form
numeric

::CONTENT UNIFORMITY, WITH CV%::
% of ingredient measured in samples and coefficient of variation separated by comma
text

|**END INGREDIENT INFO**|

|**END PRODUCT INFO**|

::NO. OF DISSOLUTION STUDIES::
total number of dissolution studies; each strength, unit (broken or whole tablet), ingredient, or study condition warrants a different study
integer

|**BEGIN DISSOLUTION INFO**| (REPEAT FOR EACH DISSOLUTION STUDY)

::DISSOLUTION STUDY NO.::
integer which uniquely identifies this dissolution study within the submission
{1,2, . . .}

::DISSOLUTION DATA FILE NAME::
reference to data file where raw individual dissolution data is located
valid DOS filename that follows naming conventions of this submission format

::STRENGTH AND UNIT OF PRODUCT(S) TESTED::
strength and dosage form tested
text

::ACTIVE INGREDIENT::
name of ingredient tested
text

::DISSOLUTION METHOD::
description of dissolution method used
text

::DISSOLUTION MEDIUM::
description of medium in which dissolution was performed

text

::VOLUME::
volume of medium in which dissolution was performed, including units
text

::DISSOLUTION APPARATUS::
apparatus used for dissolution tesing
text

::RPM::
revolutions per minute
integer

::ASSAY METHOD::
method used (HPLC or spectrophotometry with wavelength)
text

::DISSOLUTION SPECIFICATION::
Q Value: minimum % dissolved at specific time
text

::NO. OF UNITS OF EACH PRODUCT::
number of units tested
integer

::TIME UNITS::
units in which dissolution sampling times are reported
text

::NO. OF DISSOLUTION SAMPLING TIME POINTS::
number of time points for which dissolution data is reported
integer

::DISSOLUTION SAMPLING TIMES::
slash-delimited list of dissolution sampling times (in appropriate units, in ascending order)
numeric (list)

|END DISSOLUTION INFO|

::NO. OF ANALYTES::
total number of compounds (parents + metabolites) analyzed
integer

|BEGIN ASSAY VALIDATION INFO - FROM PRE-STUDY VALIDATION PACKAGE| (REPEAT FOR EACH ANALYTE)

::ANALYTE::
name of compound analyzed
text

::STABILITY TABLE DATA FILE NAME::
reference to data file for raw assay validation stability table data
valid DOS filename that follows naming conventions of this submission format

::RECOVERY DATA FILE NAME::
reference to data file for raw assay validation recovery data
valid DOS filename that follows naming conventions of this submission format

::QUALITY CONTROL DATA FILE NAME::
reference to data file for raw assay validation QC samples data
valid DOS filename that follows naming conventions of this submission format

::STANDARD CURVE DATA FILE NAME::
reference to data file for raw assay validation standard curve data
valid DOS filename that follows naming conventions of this submission format

::CONCENTRATION UNITS::
units used for concentrations in data files and fields throughout this section
text

::PEAK HEIGHT UNITS::
units used for peak heights in recovery data file
text

::NO. OF NOMINAL CONCENTRATIONS FOR STANDARD CURVE::
number of nominal concentrations in standard curve data file
integer

::NOMINAL CONCENTRATIONS FOR STANDARD CURVE::
slash-delimited list of nominal concentrations in standard curve data file
numeric (list)

::ASSAY METHOD::
method used to quantify parent or metabolite concentrations
{HPLC, RIA, . . .}

::MATRIX::
matrix in which parent and/or metabolite concentrations were measured

{blood, plasma, serum}

::INTERNAL STANDARD::
name of internal standard used for assay validation
text

::STANDARD CURVE S.O.P. NO.::
number identifying standard operating procedure if one was used
text

::SENSITIVITY::
lowest quantifiable concentration, in appropriate units
text

::HIGHEST CONCENTRATION OF STANDARD CURVE::
highest concentration of the standard curve, in appropriate units
text

::LOWEST CONCENTRATION OF STANDARD CURVE::
lowest concentration of the standard curve, in appropriate units
text

::R**2 IS GREATER THAN::
largest coefficient of determination for the standard curve
numeric

::SPECIFICITY::
indication of whether or not the assay is selective for drug and/or metabolite(s)
{yes, no}

::ANALYTE RETENTION TIME::
range of retention times for analyte, including units
text

::INTERNAL STANDARD RETENTION TIME::
range of retention times for internal standard, including units
text

|END ASSAY VALIDATION INFO - FROM PRE-STUDY VALIDATION PACKAGE|

::NO. OF STUDIES::
total number of bioequivalence studies included in this submission
integer

|**BEGIN STUDY INFO**| (REPEAT FOR EACH STUDY)

::STUDY NO.::
integer which uniquely identifies this biostudy within the submission
{1,2, . . .}

::PROTOCOL NO.::
unique identifier for this study within the submission
alphanumeric

::STUDY TITLE::
title of this study
text

|**BEGIN STUDY FACILITY INFO**|

::CLINICAL FACILITY::
name of facility where clinical component of study took place
text

::MEDICAL DIRECTOR::
full name of medical director or clinical investigator
text

::SCIENTIFIC DIRECTOR::
full name of scientific director or study coordinator
text

::CLINICAL STUDY START DATE::
date on which clinical component of biostudy began
mm/dd/yyyy

::CLINICAL STUDY END DATE::
date on which clinical component of biostudy ended
mm/dd/yyyy

::ANALYTICAL FACILITY::
name of facility where analytical component of study took place
text

::PRINCIPAL INVESTIGATOR::
full name of principal investigator for bioanalytical study
text

::ANALYTICAL STUDY START DATE::

date on which analytical component of biostudy began
mm/dd/yyyy

::ANALYTICAL STUDY END DATE::
date on which analytical component of biostudy ended
mm/dd/yyyy

|**END STUDY FACILITY INFO**|

|**BEGIN STUDY DESIGN INFO**|

::RANDOMIZED::
indication of whether this study was randomized or not
{yes, no}

::NO. OF TREATMENTS::
number of treatments evaluated in this study
integer

> |**BEGIN TREATMENT INFO**| (REPEAT FOR EACH TREATMENT)
>
> ::TREATMENT ID::
> unique identifier for this treatment
> alphanumeric, up to 10 characters
>
> ::PRODUCT ID::
> ID of product administered
> alphanumeric, up to 10 characters
>
> ::DOSE ADMINISTERED::
> dose of product administered, in appropriate units
> numeric
>
> ::STUDY CONDITION::
> condition under which study was conducted
> {fasting, fed}
>
> ::LENGTH OF FASTING::
> amount of time subjects fasted, including units
> text
>
> ::FOOD-DRUG INTERVAL::
> time between meal and drug administration, including units (N/A if fasting study)

text

::STANDARDIZED BREAKFAST::
indication of whether or not standard breakfast was given (N/A if fasting study)
{yes, no}

::BREAKFAST SPECIFICS::
brief description of food items and amounts eaten (N/A if fasting study)
text

::STANDARDIZED LUNCH::
indication of whether or not standard lunch was given (N/A if fasting study)
{yes, no}

::LUNCH SPECIFICS::
brief description of food items and amounts eaten (N/A if fasting study)
text

::STANDARDIZED DINNER::
indication of whether or not standard dinner was given (N/A if fasting study)
{yes, no}

::DINNER SPECIFICS::
brief description of food items and amounts eaten (N/A if fasting study)
text

|END TREATMENT INFO|

::NO. OF PERIODS::
number of periods in the study
integer

::NO. OF SEQUENCES::
number of sequences in the study (N/A if not randomized)
integer

|BEGIN SEQUENCE DEFINITION INFO| (REPEAT FOR EACH SEQUENCE)

::SEQUENCE ID::
unique identifier for this sequence
alphanumeric, up to 10 characters

::SEQUENCE::
slash-delimited list of treatment ID's in the order administered
alphanumeric (list)

|END SEQUENCE DEFINITION INFO|

::ADDITIONAL CLASS VARIABLES::
indication of whether or not additional class variables are analyzed
{yes, no}

::DESIGN TYPE::
type of design used in this study
{parallel, crossover, . . .}

::REPLICATED TREATMENT DESIGN::
indication of whether this design used repeated treatments
{yes, no}

::BALANCED::
indication of whether or not this design was balanced
{yes, no}

::WASHOUT PERIOD::
length of washout period along with units of time
text

::SINGLE OR MULTIPLE DOSE::
indication of whether this study is a single- or multiple-dose study
{single, multiple}

::STEADY STATE::
indication of whether or not this is a steady-state study
{yes, no}

::VOLUME OF LIQUID INTAKE WITH DOSE::
quantity of liquid taken with each treatment, including units
text

::TIME UNITS:: hr
units in which times are reported in this section
text

::DOSING INTERVAL::
time between doses, in appropriate units (N/A if single dose study)
numeric

::NO. OF DOSES::
number of doses administered in multiple-dose study (N/A if single-dose study)
integer

::LOADING DOSE::
strength of loading dose if one is administered, in appropriate units (N/A if single-dose study)
numeric

::STEADY STATE DOSE TIME::
dosing time of the analyzed steady state dose, relative to the time reported for the first sample, in appropriate units (N/A for single-dose study)
numeric

::LENGTH OF INFUSION::
length of time infusion was administered, in appropriate units
numeric

::IRB APPROVAL::
indication of whether or not study was approved by Institutional Review Board
{yes, no}

::INFORMED CONSENT OBTAINED::
indication of whether or not informed consent was obtained from subjects
{yes, no}

::NO. OF SUBJECTS ENROLLED::
total number of subjects initially enrolled in study
integer

::NO. OF SUBJECTS COMPLETING::
total number of subjects completing study
integer

::NO. OF SUBJECTS PLASMA SAMPLES ANALYZED::
number of subjects for which plasma/serum/blood samples were included in analytical results
integer

::NO. OF SUBJECTS URINE SAMPLES ANALYZED::
number of subjects for which urine samples were included in analytical results
integer

::NO. OF DROPOUTS::
number of subjects that withdrew from study
integer

|**BEGIN DROPOUT INFO**| (REPEAT FOR EACH DROPOUT)

::SUBJECT NO.::
identification of subject by number
integer

::PERIOD::
period or phase of study during which subject withdrew
integer

::REASON::
brief explanation of reasons for subject dropping out of study
text

::REPLACEMENT::
indication of whether or not another subject replaced this dropout
{yes, no}

::REPLACEMENT SUBJECT NO.::
subject number for subject that replaced this dropout (N/A if no replacement)
integer

|**END DROPOUT INFO**|

::DIETARY RESTRICTIONS::
brief explanation of restrictions on the diets of subjects during this study
text

::ACTIVITY RESTRICTIONS::
brief explanation of restrictions on the activities of subjects during this study
text

::DRUG RESTRICTIONS::

brief explanation of restrictions on other drugs taken by subjects during this study
text

::SEX(ES) INCLUDED::
indication of which sexes were included in this study
{male, female, both}

::HEALTHY VOLUNTEERS ONLY::
indication of whether or not subjects were required to be healthy volunteers
{yes, no}

::EXPLAIN IF PATIENTS ARE ENROLLED::
brief description of subjects if patients rather than healthy volunteers (N/A if healthy volunteers only)
text

|**END STUDY DESIGN INFO**|

::NO. OF ADVERSE REACTION EVENTS::
total number of adverse reactions observed in this study
integer

|**BEGIN ADVERSE REACTIONS INFO**| (REPEAT FOR EACH EVENT)

::EVENT NO.::
number which uniquely identifies this event
{1,2, . . .}

::SUBJECT NO.::
identification of subject by number
integer

::SUBJECT INITIALS::
initials of this subject's name
text

::TREATMENT ID::
ID of treatment the subject had most recently taken when the adverse reaction occured
text

::PERIOD::

period or phase of study during which adverse reaction occurred
integer

::TOTAL DOSE::
total cumulative dose subject had received at the time of the adverse reaction, including units (N/A if single dose study)
numeric

::ADVERSE REACTION::
brief description of reaction
text

::DATE OF REACTION::
date on which reaction occurred
mm/dd/yyyy

::TIME AFTER DOSE::
duration of time between dosage administration and onset of adverse reaction, including units
text

::SEVERITY::
description of severity of reaction
{mild, moderate, severe}

::ASSOCIATION WITH DRUG::
degree of certainty with which adverse reaction can be claimed to be associated with drug treatment
{definite, probable, possible, remote, unrelated}

::RESOLUTION::
indication of how adverse reaction was resolved
{spontaneously, with treatment, did not resolve}

::TIME OF RESOLUTION::
duration of time between dosage administration and resolution of adverse reaction, including units
text

::ACTION TAKEN::
description of any action(s) taken to resolve adverse reaction
text

|END ADVERSE REACTIONS INFO|

::NO. OF PHARMACODYNAMIC (PD) EFFECTS MEASURED::
number of protocol-required pharmacodynamic effects (such as blood pressure or heart rate) measured in this study
integer

|**BEGIN PHARMACODYNAMIC INFO**| (REPEAT FOR EACH PD EFFECT)

::PD DATA FILE NAME::
reference to data file where raw pharmacodynamic data is located
valid DOS filename that follows naming conventions of this submission format

::NAME OF PD EFFECT MEASURED::
name of the pharmacodynamic effect measured
text

::PD EFFECT UNITS::
units in which pharmacodynamic effect data are reported
text

::TIME UNITS::
units in which time points for effect data are reported
text

::NO. OF PD EFFECT TIME POINTS::
number of time points at which effect was measured
integer

::PD EFFECT TIME POINTS::
slash-delimited list of sampling time points (in appropriate units, in ascending order)
numeric (list)

|**END PHARMACODYNAMIC INFO**|

|**BEGIN DEMOGRAPHIC INFO**|

::DEMOGRAPHIC DATA FILE NAME::
reference to data file where raw demographic data is located
valid DOS filename that follows naming conventions of this submission format

::HEIGHT UNITS::
units in which subject heights are reported

{cm, m, in, ft}

::WEIGHT UNITS::
units in which subject weights are reported
{g, kg, lbm}

::SERUM CREATININE UNITS:: mg/dL
units in which serum creatinine values are reported
text

::CREATININE CLEARANCE UNITS:: ml/min
units in which creatinine clearance values are reported
text

|**END DEMOGRAPHIC INFO**|

::NO. OF CALCULATED PARAMETERS::
number of parameters (metrics) for which calculation methods are reported for this study
integer

|**BEGIN PARAMETER CALCULATION INFO**|

::PARAMETER::
The parameter or metric being reported
{auc, kel, thalf, serum creatinine, creatinine clearance, . . .}

::PROGRAM USED::
computer program used to calculate parameter/metric
text

::CALCULATION METHOD::
method, formula, or equation used to calculate parameter/metric
text

|**END PARAMETER CALCULATION INFO**|

::NO. OF ACTIVE INGREDIENTS::
number of product ingredients that are active
integer

|**BEGIN ACTIVE INGREDIENT INFO**| (REPEAT FOR EACH ACTIVE INGREDIENT)

::ACTIVE INGREDIENT NAME::

name of active ingredient
text

::NO. OF ACTIVE METABOLITES::
number of active metabolites of this ingredient measured in this study
integer

|BEGIN COMPOUND MEASURED INFO| (REPEAT FOR EACH PARENT COMPOUND AND/OR ACTIVE METABOLITE)

::PARENT COMPOUND OR METABOLITE NAME::
name of active parent compound (same as ingredient name) or metabolite
text

|BEGIN ASSAY OF CURRENT STUDY SAMPLE INFO|

::QUALITY CONTROL DATA FILE NAME::
reference to data file for raw within-study Bioanalytical Validation QC samples data
valid DOS filename that follows naming conventions of this submission format

::STANDARD CURVE DATA FILE NAME::
reference to data file for raw within-study Bioanalytical Validation standard curve data
valid DOS filename that follows naming conventions of this submission format

::CONCENTRATION UNITS::
units used for concentrations in within-study standard curve data file and fields throughout this section
text

::NO. OF NOMINAL CONCENTRATIONS FOR STANDARD CURVE::
number of nominal concentrations in within-study standard curve data file
integer

::NOMINAL CONCENTRATIONS FOR STANDARD CURVE::

slash-delimited list of nominal concentrations in within-study standard curve data file
numeric (list)

|END ASSAY OF CURRENT STUDY SAMPLE INFO|

::PLASMA DATA INCLUDED::
indication of whether or not blood/plasma/serum concentration-time data are included
{yes, no}

|BEGIN PLASMA INFO|

::PLASMA CONCENTRATION-TIME DATA FILE NAME::
reference to data file where plasma/blood/serum concentration-time data are located
valid DOS filename that follows naming conventions of this submission format

::PLASMA PK PARAMETERS DATA FILE NAME::
reference to data file where plasma/blood/serum PK parameters data are located
valid DOS filename that follows naming conventions of this submission format

::KEL ESTIMATION POINTS DATA FILE NAME::
reference to data file where Kel(lambda) estimation points data are located
valid DOS filename that follows naming conventions of this submission format

::PLASMA CONCENTRATION UNITS::
units in which plasma/blood/serum concentrations are reported in data file
text

::TIME UNITS::
units in which sampling time points are reported
text

::NO. OF PLASMA SAMPLING TIME POINTS::
number of time points at which plasma/blood/serum concentration was measured
integer

::PLASMA SAMPLING TIME POINTS::
slash-delimited list of sampling time points (in appropriate units, in ascending order)
numeric (list)

|END PLASMA INFO|

::URINE DATA INCLUDED::
indication of whether or not urine excretion-time data are included
{yes, no}

|BEGIN URINE INFO|

::URINE EXCRETION DATA FILE NAME::
reference to data file where urine excretion-time data are located
valid DOS filename that follows naming conventions of this submission format

::URINE PK PARAMETERS DATA FILE NAME::
reference to data file where urinary excretion PK parameters (metrics) are located
valid DOS filename that follows naming conventions of this submission format

::URINARY EXCRETION UNITS::
units in which cumulative amount excreted in urine is reported in data file
text

::TIME UNITS::
units in which sampling time points are reported
text

::NO. OF URINE COLLECTION INTERVALS::
number of intervals during which urinary excretion data were collected
integer

::URINE COLLECTION TIMES::
slash-delimited list of endpoint of each collection interval (in appropriate units, in ascending order)
numeric (list)

|END URINE INFO|

|BEGIN STATISTICS INFO| (REPEAT FOR EACH PARAMETER AND TEST-REFERENCE PAIR)

::PARAMETER::
name of parameter or metric from list provided (L denotes log-transformed values)
{auct, auci, cmax, tmax, kel(lambda), thalf, lauct, lauci, lcmax, . . .}

::TYPE OF MEAN::
mean used for this analysis
{arithmetic, geometric, least squares arithmetic, least squares geometric}

::TEST TREATMENT ID::
treatment ID for test treatment
alphanumeric

::TEST LSMEAN::
mean for test treatment
numeric

::TEST CV%::
SD/MEAN * 100 for test treatment (N/A for log parameter)
numeric

::REFERENCE TREATMENT ID::
treatment ID for reference product
alphanumeric

::REFERENCE LSMEAN::
mean for reference treatment
numeric

::REFERENCE CV%::
SD/MEAN * 100 for reference treatment (N/A for log parameter)
numeric

::TEST/REFERENCE RATIO OF LSMEANS::
mean ratio, calculation depends on type of mean (N/A for non-log parameter)
numeric

::LOWER 90% CONFIDENCE INTERVAL::
lower bound of two one-sided t-test confidence interval at 90% level (refer to OGD's 7/92 Statistics Guidance, N/A for non-log parameter)
numeric

::UPPER 90% CONFIDENCE INTERVAL::
upper bound of two one-sided t-test confidence interval at 90% level (refer to OGD's 7/92 Statistics Guidance, N/A for non-log parameter)
numeric

|END STATISTICS INFO|

|END COMPOUND MEASURED INFO|

|END ACTIVE INGREDIENT INFO|

|END STUDY INFO|

|END SUBMISSION INFO|